

CLAIMS

What is claimed is:

1. A capacity and material target forecasting system used in SCM (Supply Chain Management) of manufacturing industries, which comprises:

5 a storage medium, which stores data for making the capacity and material target forecast including at least:

a capacity demand unit, which determines the capacity demand according to a product order given from a client end;

10 a material demand unit, which determines the material demand according to a material purchasing order sent to a supplier in accordance with the capacity demand; and

a capacity and material demand reporting unit, which executes computation of the capacity and material plan through an enterprise resource plan for a decision-maker's reference; and

15 a capacity and material target forecasting module including at least:

20 a capacity and material demand forecasting unit, which uses a supply chain management software to run a batch operation to generate trading data, performs forecast for the capacity demand and the unconstrained material demand, then performs forecast for the capacity demand and the constrained material demand, generates a preliminary capacity and material demand forecasting report, and outputs a supply chain planning result through the supply chain management software according to the preliminary capacity and material demand forecasting report; and

a decision adjusting unit, which makes purchasing adjustment according to the preliminary capacity and material demand forecasting report and outputs an actual capacity and material demand report, which is sent to the supplier for adjusting the material demand.

5 2. The system of claim 1, wherein the client and the supplier are connected through the Internet and the business trades and information transmissions are performed through a B-to-B platform.

10 3. The system of claim 1, wherein the trading data include one combination selected from the group comprising items, purchasing orders, production orders, actual shipping, open sales orders, on-hand stocks, BOM's (Bill Of Material), material related data, vendor source lists, and quotation of prices.

4. The system of claim 1 further comprising the step of updating the supply chain plan result in the enterprise resource plan.

15 5. The system of claim 1, wherein the decision adjusting unit further allows a decision maker to adjust the purchasing plan.

6. The system of claim 1 further providing a GUI (Graphics User Interface) to perform forecasting operations.

20 7. The system of claim 1, wherein the purchasing plan adjustment also performs different material resource plans according to a branch PIR (Planned Independent Requirement).

8. The system of claim 7, wherein the branch PIR takes into account the branch attributes and orientations.

9. A capacity and material target forecasting module used in the SCM for manufacturing industries to forecast an actual capacity and material demand according to a

capacity demand and a material demand in order to minimizes material stocks, which module comprises:

a capacity and material demand forecasting unit, which uses a supply chain management software to run a batch operation to generate trading data, performs forecast for the capacity demand and the unconstrained material demand, then performs forecast for the capacity demand and the constrained material demand, generates a preliminary capacity and material demand forecasting report, and outputs a supply chain planning result through the supply chain management software according to the preliminary capacity and material demand forecasting report; and

a decision adjusting unit, which makes purchasing adjustment according to the preliminary capacity and material demand forecasting report and outputs an actual capacity and material demand report, which is sent to the supplier for adjusting the material demand.

10. The module of claim 9, wherein the capacity demand is determined according to a product order given from a client end.

11. The module of claim 9, wherein the material demand is determined according to a material purchasing order sent to a supplier in accordance with the capacity demand.

12. The module of claim 9, wherein the capacity demand and the material demand are connected via the Internet and the business trades and information transmissions are performed through a B-to-B platform.

13. The module of claim 9, wherein the trading data include one combination selected from the group comprising items, purchasing orders, production orders, actual shipping, open sales orders, on-hand stocks, BOM's (Bill Of Material), material related data, vendor source lists, and quotation of prices.

14. The module of claim 9 further comprising the step of updating the supply chain plan result in the enterprise resource plan.

15. The module of claim 9, wherein the decision adjusting unit further allows a decision maker to adjust the purchasing plan.

5 16. The module of claim 9 further providing a GUI (Graphics User Interface) to perform forecasting operations.

17. The module of claim 9, wherein the purchasing plan adjustment also performs different material resource plans according to a branch PIR (Planned Independent Requirement).

10 18. The module of claim 17, wherein the branch PIR takes into account the branch attributes and orientations.

19. A capacity and material target forecasting method used in the SCM of manufacturing industries, which comprises the steps of:

15 using a supply chain management software to run a batch operation and to generate trade data;

performing capacity demand and unconstrained material demand forecast according to the trade data and generating a preliminary material demand;

20 performing the capacity demand and the constrained material demand forecast according to the preliminary material demand and generating a preliminary capacity and material demand forecasting report;

executing a branch PIR according to the preliminary capacity and material demand forecasting report and outputting a supply chain planning result through the supply chain management software; and

performing purchasing adjustment according to the preliminary capacity and material demand forecasting report and outputting an actual capacity and material demand report, which is then sent to a supplier to adjust the material demand.

- 5 20. The method of claim 19, wherein the trading data include one combination selected from the group comprising items, purchasing orders, production orders, actual shipping, open sales orders, on-hand stocks, BOM's (Bill Of Material), material related data, vendor source lists, and quotation of prices.

- 10 21. The method of claim 19 further comprising the step of updating the supply chain plan result in the enterprise resource plan.

22. The method of claim 19, wherein the purchasing adjustment further allows a decision maker to adjust the purchasing plan.

23. The method of claim 19 further providing a GUI (Graphics User Interface) to perform forecasting operations.

- 15 24. The method of claim 19, wherein the purchasing adjustment also performs different material resource plans according to a branch PIR (Planned Independent Requirement).

25. The method of claim 24, wherein the branch PIR takes into account the branch attributes and orientations.